

# Court-imposed fines as a feature of the homelessness-incarceration nexus: a cross-sectional study of the relationship between legal debt and duration of homelessness in Seattle, Washington, USA

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## ABSTRACT

**Background** Legal system involvement is a policy-driven risk factor for homelessness. Legal financial obligations (LFOs), such as court fees, fines and restitution, can endanger the financial security of those ensnared in the criminal justice system. In this study we measured the effect of incarceration and LFOs on duration of homelessness in Seattle, WA, USA.

**Methods** To analyze the relationship between incarceration, debt and duration of homelessness, we interviewed 101 adults experiencing homelessness and living in city-sanctioned encampments and tiny house villages in Seattle, WA in 2017–18. We collected personal housing history, presence and amount of debt, and measures of legal system involvement.

**Results** Our respondents experienced homelessness an average of 41 months during the current episode. Nearly two-thirds reported being convicted of a crime, and 78% had been incarcerated. More than 25% reported owing current legal fines. Individuals with legal fine debt experienced 22.9 months of additional homelessness after considering the effects of race, age, and gender.

**Conclusion** We confirmed a strong association between homelessness and legal trouble. Among high-income countries, the USA has the highest rates of legal system involvement and the highest rates of homelessness; the relationship between the two may be connected.

**Keywords** Housing, public health, social determinants

## Introduction

Homelessness is a public health issue; people experiencing homelessness have poorer mental and physical health and live shorter lives than their housed peers.<sup>1–3</sup> Previous studies have shown people who experience longer durations of homelessness have worse health outcomes than those who experience brief or intermittent episodes of homelessness.<sup>3</sup>

This study took place in the greater Seattle area in King County, the most densely populated county in Washington State. The prevalence of homelessness in King County is more than twice that of the national prevalence in the United States (US) (35.8 per 10 000 and 17.0 per 10 000 respectively).<sup>4–7</sup> In November 2015, Seattle's Mayor and the King County Executive declared the homelessness crisis a regional emergency.<sup>8</sup> Nevertheless, the number of people sleeping in

places not meant for human habitation in and around Seattle continues to increase.<sup>6</sup> The 2018 'point-in-time count' identified 12 112 people experiencing homelessness.<sup>9</sup>

## Duration of homelessness

The total burden of homelessness is a function of individuals entering homelessness and the length of time individuals remain homeless. While there is bountiful research on the causes of homelessness, less attention has been paid to predictors of duration of homelessness. Previous studies

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identified older age, substance use disorders, and a history of incarceration as risk factors for longer homelessness.<sup>10,11</sup>

Many people experiencing chronic homelessness access stable housing in-between episodes of homelessness. As such, it is important to differentiate between the current episode of homelessness and the total time a person has experienced housing instability.<sup>12,13</sup>

### Legal entanglements and homelessness

Mabhala describes the road to homelessness as ‘characterized by a progressive waning of resilience created by a series of adverse incidents in one’s life.’<sup>14</sup> This framework adeptly brings into focus the systemic reduction of options for people in poverty. People experiencing homelessness are criminalized for adaptive, but often illegal, survivalist activities, especially if those activities are visible to the public.<sup>15,16</sup> Punishment for the strategies of resilience carried out by those experiencing homelessness manifests in physical, structural, social, and monetary sanctions.<sup>17</sup> We use the terms legal (system) entanglement/involvement, legal trouble, and interactions with the criminal justice system interchangeably as general terms to cover the breadth of potential criminal justice system involvement.

The criminalization of the visibly poor is common practice in the US. A 2015 analysis of municipal ordinances in Washington State revealed three in four cities penalized behaviors incidental to homelessness: standing or sitting in public, sleeping in public, or urinating in public. Criminalization ordinances are discriminatory in nature, often inconsistently enforced, and disproportionately affect marginalized groups.<sup>18</sup>

A study of the US jail population found nearly one in six inmates had experienced homelessness at some point in the year prior to their incarceration. Those who were experiencing homelessness at the time of their incarceration were more likely than other inmates to be convicted of property crime and to have past incarcerations.<sup>19</sup>

The relationship between criminal convictions and homelessness is so well established the two are difficult to tease apart, despite research devoted to uncovering the factorial interactions. Scholars have described the mechanisms of reciprocity between incarceration and housing insecurity as the ‘homelessness-incarceration nexus,’<sup>15,16,20</sup> and ‘revolving doors,’<sup>21–23</sup> two life events that ‘increase the risk of each other.’<sup>19</sup> Jail and prison discharge policies and the disruption wrought by incarceration also put newly-released inmates at risk of homelessness.<sup>16,24,25</sup>

### Legal financial obligations

Legal financial obligations (LFOs) are monetary sanctions incidental to legal system involvement. In all US states,

defendants are ordered by the court to pay fees, fines, and restitution as part of their criminal sentence. LFOs were devised as a symbolic form of accountability, with the practical intent of collecting restitution for victims and recuperating the increasing costs of the criminal justice system. While those charged with LFOs are legally obligated to pay, only a small percentage of the outstanding debt imposed on defendants is ever actually collected. Harris reported previously incarcerated individuals face strenuous LFO debt burdens, and that after states expend significant resources to collect fines, little remains for victim restitution.<sup>26,27</sup>

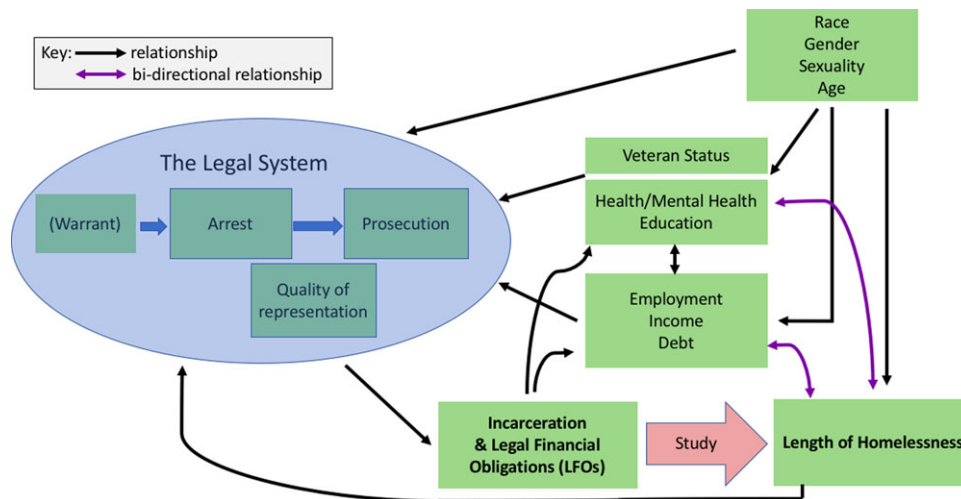
LFO policies differ state to state. In Washington State, which implemented LFO policies to collect court fees, fines and restitution in 1989, the mandatory minimum court-imposed fine is \$600, which is meant to include a victim penalty assessment and a fee for DNA collection. Harris found, however, the average was more than double the minimum, at \$1 300, with substantial variation by county. LFO debt grows quickly, with a 12% interest rate imposed the day of sentencing along with an annual collection charge of \$100 per felony conviction (a new Washington State law changes this however, see below).<sup>26,28</sup> LFO debt has often been sold to private collection agencies, which add their own fees. Harris found many defendants struggled to pay down their LFO debt, as minimum payments often barely cover interest.<sup>26</sup>

The US Supreme Court has, since 1971, prohibited states from imprisoning legal debtors unless the court can prove ‘willful nonpayment.’<sup>26</sup> Outstanding LFOs can nevertheless lead to incarceration, however, as nonpayment is considered failure to comply with court orders. Courts hold frequent hearings to re-assess ability to pay, and legal debtors are routinely incarcerated after brief hearings determine they are willfully non-compliant.<sup>26</sup> Statements and court orders are sent primarily through the mail,<sup>27</sup> raising risks for those with unreliable or nonexistent addresses. Monetary sanctions are an insurmountable and life-long punishment for the poor, perpetuating forms of exclusion and oppression.<sup>18,26</sup>

While Harris’ research provides insight into LFOs and their consequences, literature on the relationship between legal fines and homelessness is lacking. The goal of this study was to examine the relationship between LFOs and duration of the most recent episode of homelessness as a portion of the homelessness-incarceration nexus. Based on the literature, we hypothesized people burdened by LFOs would have a longer experience of homelessness (see Fig. 1).

### Methods

To test our hypothesis, we developed a retrospective cross-sectional questionnaire-based study with duration of



**Fig. 1** Conceptual Model. The relationships between legal system entanglement, population characteristics and demographics, and duration of homelessness.

homelessness as an outcome and all types of debt, especially debt related to legal trouble, as the primary predictor. We also considered participant incarceration to distinguish the effect of LFOs from the well-established effect of incarceration on homelessness.

### Data collection

We interviewed a sample of 101 adults experiencing homelessness in the greater Seattle area to examine the relationship between incarceration, legal debt, and homelessness. We piloted several versions of the questionnaire at Tent City 3, a city-sanctioned encampment managed by Seattle Housing and Resource Effort (SHARE). Our sample was restricted to people 18 years of age or older who were experiencing homelessness in King County and living in city-authorized encampments and tiny house villages.

The researchers have a long-standing relationship with the city's democratically self-governed homeless encampments, SHARE and Nickelsville. These authorized sites with tents and/or temporary structures (e.g. tiny houses) provide alternatives to traditional overnight shelters for people experiencing homelessness. In each location we obtained permission to survey residents after the lead researcher introduced the study and answered questions at a camp meeting. Residents then voted to grant permission. Individual participants were recruited and interviewed in common spaces (most often the 'kitchen tent').

The survey team was led by the first author (JM), who trained an additional 12 volunteers, seven of whom were in a UW undergraduate honors class. Training consisted of data integrity and anti-oppression curriculum.<sup>29–32</sup> Between 4 August 2017 and 28 February 2018, we made 30 visits to

eight locations where people experiencing homelessness were staying: three encampments and five tiny house villages in the Seattle metropolitan area. Each visit yielded zero to ten semi-structured interviews. Data were captured using Open Data Kit (ODK) software<sup>33</sup> on smart phones and tablets. When an electronic device was not available, data were collected on paper, entered into Excel, and later added to the complete ODK dataset. Instead of providing individual incentives to participants, we brought donations to the encampments each time we visited.

This project was determined by the UW IRB to be exempt from ethical review (UW IRB ID #STUDY00002745, exempt status category 2). People interested in the study gave verbal consent before being interviewed. The researcher asked the survey questions verbally and recorded the answers unless the participant requested to complete the survey independently.

### Survey content

Survey questions pertained to our outcome variable (duration of current episode of homelessness) along with predictor and confounding variables: demographics, health status, legal system involvement, debt and finances, and demographic information. Our questionnaire is available upon request.

### Housing history

We calculated duration of current episode of homelessness using the survey date and the date the participant last had a permanent address. We also calculated the duration of time since the participant first experienced homelessness. We also recorded the locations where the participant first experienced

homelessness and their last permanent address, which we later coded as in Washington State or elsewhere.

### Demographics and health

We asked participants about their veteran status, health status, educational attainment, current employment, income, race, gender, sexual orientation, and age, as these were potential confounders in our conceptual model. We also asked about geographic origins, as this is a matter of some contention; communities debate whether individuals became homeless where they last had housing or moved to the area because of attractive conditions for homelessness.

We considered health status to be a control variable in our model. Using a few questions from the SF-36, we asked participants to rate their health on a five-point Likert scale, to identify their medical problems from a list of twenty common health problems, and to answer two questions on depression and fatigue.<sup>34</sup> We also asked about health insurance and medical debt.

### Legal system involvement

Our primary predictor variables involved legal system factors. As we were innovating this portion of our questionnaire without benefit of a previously published or validated instrument, we tested several rounds of questions before settling on a dozen questions (plus sub-parts) on convictions, warrants, incarceration, legal fines and debt, and the person's view of whether legal trouble contributed to housing instability.

### Debt and finances

We asked specific questions about several types of debt besides LFOs, as we were concerned about confounding and effect modification: medical debt, student loan debt, credit card debt, and payday loans. Participants were asked to estimate the amount of debt they owed and report if or when they had ever made a payment on outstanding LFOs or medical bills. Participants also self-reported income, including food stamps and disability.

### Data analysis

We used Stata/SE 14.2 software for data analysis. We used two-tailed t-tests and Fischer's exact tests to assess average duration of current episode of homelessness as predicted by each independent variable.

Because there was missing data on amount of debt owed, and many participants admitted uncertainty about the amount of debt owed, we did not use amount of debt in our final analysis. Instead, we relied on yes/no responses to

questions about debt. To control for outliers, we capped the duration of current episode of homelessness at 111 months, number of times incarcerated at 35, and lifetime incarceration at 150 months. We also capped monthly income at \$2 500 to reduce the influence of four participants who reported incomes up to \$4 500. The six respondents who claimed two races were categorized as people of color in binary coding.

For our regression models, we started with a conceptual framework of the relationships between legal entanglements and homelessness (see Fig. 1). After analyzing crosstabs for each control and demographic variable in relation to our primary predictor variables (legal debts and fines, as well as incarceration), we built our regression step-wise, using predictor variables we found to be most strongly associated with duration of homelessness in our sample along with demographic variables. We elected not to include incarceration as a predictor variable in our model, because it was too correlated with legal debts and fines. After dropping respondents with missing data, our final regression model included 92 (of the original 101) individuals.

## Results

### Demographics, health and housing history

Our typical respondent was a white, heterosexual, cisgender male in his 40s who had completed some college or attended a trade school. More than one-third (36%) of our participants were employed, with a median reported income of \$400 per month (right skew, mean \$769/month). More than half of respondents first became homeless or had their most recent permanent address in Washington State (57% and 56% respectively) and one-third (33%) attended high school in Washington State. About one in seven of our respondents was a veteran. The mean duration of the current episode of homelessness was nearly 3.5 years (41.2 months, median 25.5 months). Our typical respondent was on Medicaid, had more than four health conditions, and had experienced trauma. One in four respondents reported an unhealthy relationship with drugs or alcohol. See Tables 1 and 2.

### Incarceration and LFO history

The large majority of our respondents had interactions with the criminal justice system. More than three in five respondents had been convicted of a crime or had a warrant for their arrest (63% and 64% respectively) and more than three in four (78%) had been incarcerated. Including those with no incarcerations, the mean number of incarcerations was

**Table 1** Sample characteristics

	n	%
<b>Race<sup>a</sup></b>		
Asian	1	1.0
Multiracial	5	5.2
Latino	6	6.3
Black/African American	8	8.3
AI/AN/NH <sup>b</sup>	11	11.5
White	72	75.0
<b>Age, years<sup>c</sup></b>		
mean (SD)		43.3 (11.6)
range		(22, 67)
<b>Gender<sup>c</sup></b>		
Transgender or gender non-conforming	3	3.0
Female	28	28.3
Male	68	68.7
<b>Sexual orientation<sup>d</sup></b>		
Lesbian, gay, bisexual, or other	10	12.0
Heterosexual	88	88.0
<b>Education<sup>c</sup></b>		
Less than high school	21	21.2
High school, GED or equivalent	25	25.3
Some college, trade school, vocational school, or Associate degree	40	40.4
Bachelor's degree or higher	13	13.1
<b>Currently employed<sup>c</sup></b>	36	36.4
<b>Typical monthly income, including food stamps, \$<sup>a</sup></b>		
mean (SD)		769 (744)
median (IQR)		400 (194, 1000)
range		(0, 4 500)
<b>US military veteran<sup>c</sup></b>	14	14.1
<b>Attended high school in WA state<sup>c</sup></b>	33	33.3
<b>First became homeless in WA state</b>	58	57.4
<b>Last stable housing in WA state</b>	56	55.5
<b>Duration of current episode of homelessness</b>		
mean (SD), months		41.2 (57.7)
median (IQR), months		25.5 (7.9, 48.2)
6 months or less	10	8.9
6 to 12 months	21	20.8
1 to 2 years	18	17.8
2 to 3 years	11	10.9
3 to 4 years	15	14.9
4 to 5 years	7	6.9
5 to 10 years	14	13.9
10 years or more	5	5.0
<b>Duration of time since first experience of homelessness</b>		
mean (SD), years		11.5 (12.4)
median (IQR), years		5.0 (2.0, 17.0)
1 year or less	15	14.9
1 to 3 years	21	20.8
3 to 6 years	17	16.8

*Continued*

**Table 1** Continued

	n	%
6 to 10 years	15	14.9
10 to 20 years	10	9.9
20 years or more	23	22.8

<sup>a</sup>*n* = 96, six respondents selected two races.

<sup>b</sup>AI/AN/NH= American Indian/Alaska Native/Native Hawaiian.

<sup>c</sup>*n* = 99.

<sup>d</sup>*n* = 98.

Source: Survey of adults living in outdoor encampments, Seattle, WA 2017–18 (*n* = 101).

7.3 (median 3.0) and the mean lifetime incarceration (total time spent in jail, prison or detention centers) was nearly two years. About one in five (13%) respondents were on probation or parole at the time of the survey. Nearly one in four respondents (23%) reported difficulty finding permanent housing due to their arrest history. We did not ask about types of violations leading to arrest or incarceration.

About one in eight (12%) participants reported ever losing household income because a family member was incarcerated. Fewer than one in four (23%) of those with outstanding LFOs had ever made a payment on them, with an average LFO debt of \$12 015. More than half (57%) of sentences included a fine and fewer than half (44%) reported paying the fine in full. See Table 3.

### Respondent characteristics as predictors of duration of homelessness

People who identified as white in our sample experienced on average one and a half years longer homelessness during the current episode than people of color ( $p < 0.05$ ). Men also experienced a longer duration of current episode of homelessness, compared to people with other gender identities (38.7 months compared to 25.9 months,  $p = 0.071$ ).

Outstanding LFOs were associated with duration of current episode of homelessness ( $p < 0.001$ ) before considering the effect of any other independent variables. Other types of debt (credit card, payday loans, student loans) were not statistically significantly associated with duration of homelessness. See Table 4.

Our regression model controlled for age, race (white vs. non-white), and gender (male vs. non-male). We found those with outstanding LFOs experienced just shy of two years of additional homelessness (1.9 years) in their current episode of homelessness. See Table 5.

## Discussion

### Main findings of this study

Our findings show a significant association between LFO debts and duration of current episode of homelessness. LFO debts were the only type of debt in our sample found to be statistically significantly associated with longer homelessness, potentially indicating these court-imposed fines are more detrimental to housing stability than other debts. This may be because LFO debts are indicative of criminal justice system involvement, which on its own can have a destabilizing effect. Conversely, those who experience longer homelessness may be more likely to accrue LFOs. As our study is cross-sectional, we cannot determine the direction of this association. More research is needed to understand the exact nature of the relationship between LFOs and homelessness.

Income was not a deciding factor of duration of homelessness, likely because all participant monthly incomes were well below the threshold of housing affordability; the median gross rent in Seattle was \$1 266 between 2012 and 2016 and the median income in our sample was \$400 per month.<sup>5</sup> Credit card debt was associated with shorter episodes of homelessness, although this finding was not statistically significant. We speculate those with access to credit cards are likely to have other financial resources or may have used credit to stave off homelessness for a time. Future research should explore the relationship between credit card debt and duration of homelessness.

We found health status, chronic conditions, and mental health conditions did not predict duration of homelessness. Unexpectedly, a self-reported unhealthy relationship with alcohol or other drugs was not a determining factor of duration of homelessness in our sample. We also did not find a statistically significant difference in duration of homelessness based on veteran status.



**Table 2** Health status of survey respondents

	<i>n</i>	%
<b>Avg # of conditions</b>	4.6	(min 0 max 13)
<b>One or more chronic illnesses</b>	46	45.5
<b>One or more mental health issues</b>	78	77.2
<b>Physical disability</b>	45	44.6
<b>Experienced trauma</b>	55	54.5
<b>Unhealthy relationship with alcohol or other drugs</b>	25	24.8
<b>During the past four weeks, how often have you felt so down that nothing could cheer you up?<sup>a</sup></b>		
None of the time	32	32.0
A little bit or some of the time	42	42.0
A good bit or most of the time	22	22.0
All of the time	4	4.0
<b>During the past four weeks, how often have you felt tired?<sup>a</sup></b>		
None of the time	10	10.0
A little bit or some of the time	37	37.0
A good bit or most of the time	36	36.0
All of the time	17	17.0
<b>Self-rated health</b>		
Excellent	6	5.9
Very good	17	16.8
Good	39	38.6
Fair	32	31.7
Poor	7	6.9
<b>Is your health better or worse now than it was one year ago?</b>		
Better	40	39.6
Same	30	29.7
Worse	31	30.7
<b>Insurance status<sup>a</sup></b>		
VA	4	4.0
Private/other	5	5.0
Medicare	16	16.0
No health insurance	17	17.0
Medicaid/Apple Health	58	58.0
<b>Reported problems paying medical bills in the last year</b>	40	40.0
<b>Has medical debt<sup>b</sup></b>	56	56.6
mean (SD), \$	56 329 (169019)	
range, \$	(30, 1 000000)	
median (IQR), \$	4 000 (1 000, 13 000)	

<sup>a</sup>*n* = 100.<sup>b</sup>*n* = 99.Source: Survey of adults living in outdoor encampments, Seattle, WA 2017–18 (*n* = 101).

Our sample is older, more white, and more formally educated than the sample in a larger city-conducted study of the population experiencing homelessness in Seattle in 2016.<sup>35</sup> We suspect democratically self-governed homeless encampments are more appealing as shelter alternatives to certain people, potentially skewing our population sample. In our sample, people who identified as white had a statistically

significantly longer current episode of homelessness than people of color (17.5 months longer). One potential reason for this finding is that a higher proportion of those with LFO debts in our sample identified as white than non-white; 41% of white respondents had legal debts compared to 31% of respondents of color. Other studies evaluating duration of homelessness found race was not a significant predictor.<sup>10,11</sup>

**Table 3** Entanglements with the legal system: survey respondent incarceration and LFO history

	<i>n</i>	%
<b>Ever convicted of a crime<sup>a</sup></b>	63	63.0
<b>Ever had a warrant for arrest<sup>a</sup></b>	64	64.0
Current warrant ( <i>n</i> = 58)	15	25.9
<b>Ever incarcerated<sup>a</sup></b>	78	78.0
<b>Number of times incarcerated<sup>b</sup></b>		
mean (SD)		7.3 (9.5)
median (IQR)		3.0 (1.0, 10.0)
<b>Lifetime incarceration, months<sup>b</sup></b>		
mean (SD)		23.6 (42.3)
median (IQR)		3.5 (0.0, 24.0)
<b>Currently on probation or parole<sup>c</sup></b>	13	13.1
<b>Reported difficulty finding permanent housing due to arrest history<sup>b</sup></b>	22	22.7
<b>Ever lost household income because a family member was incarcerated<sup>a</sup></b>	12	12.0
Believe loss of income in part responsible for current housing situation ( <i>n</i> = 12)	5	41.7
<b>Reported problems paying LFOs in the last year<sup>a</sup></b>	26	26
<b>Reported paying for bills related to being in legal trouble has at some point made it difficult to find or keep a permanent address<sup>c</sup></b>	26	26.3
<b>Has LFO debt<sup>c</sup></b>	38	38.4
Location of debt: WA ( <i>n</i> = 37)	23	62.1
Location of debt: elsewhere ( <i>n</i> = 37)	14	37.8
Ever made a payment on outstanding LFOs ( <i>n</i> = 35)	8	22.9
<b>Amount of LFO debt of those with LFO debt (<i>n</i> = 34), \$</b>		
mean (SD)		12 015 (23 270)
median (IQR)		3 000 (1 000, 10 000)
range		(160, 120 000)
1–1 000	9	26.5
1 001–3 000	9	26.5
3 001–5 000	6	17.7
5 001–10 000	2	5.9
10 001+	8	23.5
<b>Most Recent Incarceration:</b>	<b>n</b>	<b>% of those incarcerated (<i>n</i> = 78)</b>
<b>Facility</b>		
Detention center	2	2.6
Prison	8	10.3
Jail	68	87.2
<b>Convicted with a plea deal</b>	28	37.3
<b>Location of incarceration<sup>a</sup></b>		
WA	36	46.8
Elsewhere	41	53.3
<b>Duration of incarceration, days<sup>d</sup></b>		
mean (SD), days		117.3 (207.2)
median (IQR)		21.0 (3.0, 96.0)
<b>Incarcerated during current homeless episode<sup>a</sup></b>	27	35.7
<b>Sentence included a fine<sup>c</sup></b>	43	56.6

Continued



**Table 3** Continued

	<i>n</i>	%
mean (SD), \$		4 042 (7 502)
median (IQR), \$		900 (500, 9 000)
Paid the fine in full (of <i>n</i> = 43)	19	44.2

<sup>a</sup>*n* = 100 or 77, one data point missing.

<sup>b</sup>*n* = 97, four data points missing.

<sup>c</sup>*n* = 99 or 76, two data points missing.

<sup>d</sup>*n* = 75, three data points missing.

Source: Survey of adults living in outdoor encampments, Seattle, WA 2017–18 (*n* = 101).

Future research should investigate factors which contribute to racial differences in duration of homelessness.

### What is already known on this topic

Our findings substantiate literature about the overcriminalization of people experiencing homelessness, regardless of race.<sup>18,19</sup> While people of color are burdened with an increased risk of both homelessness and incarceration,<sup>24,36–38</sup> our largely white sample had surprisingly high levels of legal system involvement. Previous studies have identified incarceration history as a predictor of longer homelessness.<sup>10,11</sup> To our knowledge, however, this is the first study to examine the discrete effect of LFOs on duration of homelessness.

Harris's 2016 book established the theoretical grounds for an evaluation of LFOs as an insurmountable punishment for the poor. Her research revealed the consequences of LFOs for those without the ability to pay.<sup>26</sup> Our study confirms Harris's findings, and adds depth to this emerging field by including people experiencing homelessness in the broader discussion about LFO policies.

### Limitations of this study

The measures of duration of homelessness in our study are underestimates, as survey respondents were in the midst of an episode of homelessness which may have continued well beyond the survey date. This is a well established limitation of point-in-time measures of duration of homelessness.<sup>13</sup> We also collected information about lifetime homelessness, the analysis of which was beyond the scope of this paper.

Our data were self-reported and subject to recall bias. This was especially true for questions about debt amounts, as many respondents said that they did not closely track debts that they knew they couldn't pay. Our sampling technique was vulnerable to selection bias, as those who have not interacted with the criminal justice system may have

assumed our survey did not apply to them, and those who associated their arrest history with their current housing situation may have been more inclined to participate.

Those living in sanctioned encampments are likely different from other segments of the homeless population. The generalizability of our results is limited by the unique context of homelessness in Seattle, including the presence of city-sanctioned encampments as a response to homelessness and our relatively small sample size. We did not ask participants specifically about child support as a form of legal fines, but six participants mentioned child support debts.

### What this study adds

It is the role of public health practitioners to scrutinize the consequences of public policies as they relate to health. Our research found LFO debts can predict duration of homelessness and interact at a crucial intersection between legal entanglements and homelessness. Given policies which criminalize the visible poor and considering known barriers to rehabilitation following incarceration, LFOs pose an inequitable burden on those without the ability to pay.

As the prevalence of homelessness and incarceration increases, population health is at risk. Revising LFO policies and practice may be a way to interrupt the revolving doors of homelessness and incarceration. Diverting resources from the collection of fees and fines could lighten the burden on some of the most vulnerable members of our communities and provide opportunities for more productive uses of public funds.

### Conclusion

We confirmed a strong association between homelessness and legal system entanglement. Among high-income countries, the US has the highest rates of legal system involvement and the highest rates of homelessness,<sup>3,39</sup> the relationship

**Table 4** Characteristics of sample in relation to duration of current episode of homelessness

	Mean months of homelessness	t-test or ANOVA p-value
Race <sup>a</sup>		
White only	40.4	<b>0.020*</b>
People of color	22.9	
Age <sup>b</sup>		
Low [22–38 years]	28.5	0.109
Med [39–48 years]	31.0	
High [49–67 years]	44.3	
Gender <sup>b</sup>		
Male	38.7	0.071
Non-male	25.9	
Sexual orientation <sup>c</sup>		
Lesbian, gay, bisexual or other	42.4	0.528
Heterosexual	35.3	
Education <sup>b</sup>		
Less than high school	38.8	0.888
High school, GED, or equivalent	31.0	
Some college, trade school, vocational school, or Associate degree	35.0	
Bachelor's degree or higher	35.1	
Currently employed <sup>b</sup>		
Yes	36.1	0.761
No	34.0	
Typical monthly income, including food stamps <sup>d</sup>		
Low [\$0–\$197]	33.0	0.876
Med [\$198–\$855]	37.4	
High [\$856–\$4 500]	35.6	
US military veteran <sup>b</sup>		
Yes	27.5	0.322
No	37.1	
Ever convicted of a crime <sup>e</sup>		
Yes	36.6	0.627
No	33.2	
Ever had a warrant for arrest <sup>e</sup>		
Yes	37.0	0.530
No	32.5	
Ever incarcerated <sup>e</sup>		
Yes	36.7	0.457
No	30.6	
Incarcerated for more than 30 days in lifetime <sup>f</sup>		
Yes	32.7	0.630
No	36.0	
Most recent incarceration more than 6 days for those with incarceration history ( <i>n</i> = 76)		
Yes	35.8	0.835
No	37.5	
Reported problems paying LFOs in the last year <sup>e</sup>		
Yes	41.3	0.303
No	33.4	

*Continued*

**Table 4** Continued

	Mean months of homelessness	t-test or ANOVA p-value
Has LFO debt <sup>b</sup>		
Yes	51.8	<b>&lt;0.001*</b>
No	25.6	
Has any other debt (non-LFO) <sup>e</sup>		
Yes	36.6	0.521
No	31.5	
Has medical debt <sup>b</sup>		
Yes	36.3	0.848
No	35.0	
Has student loan debt <sup>c</sup>		
Yes	37.0	0.804
No	35.2	
Has credit card debt <sup>c</sup>		
Yes	26.1	0.229
No	37.5	
Has payday loan debt <sup>c</sup>		
Yes	35.9	0.987
No	35.7	
Has any debt <sup>e</sup>		
Yes	37.6	0.177
No	25.8	

<sup>a</sup>*n* = 96.<sup>b</sup>*n* = 99.<sup>c</sup>*n* = 98.<sup>d</sup>*n* = 95.<sup>e</sup>*n* = 100.<sup>f</sup>*n* = 97.\**P* < 0.05.Source: Survey of adults living in outdoor encampments, Seattle, WA 2017–2018 (*n* = 101).**Table 5** Predictors of duration of current episode of homelessness (months) in regression analysis

Predictor	$\beta$	95% CI
Has LFO debt	22.90*	(10.12, 35.69)
Race, white only	12.68	(−1.24, 26.61)
Age, years	0.56*	(0.02, 1.09)
Gender, male	5.55	(−7.72, 18.82)

\**p* < 0.05.Source: Survey of adults living in outdoor encampments, Seattle, WA 2017–18 (*n* = 92).

between the two may be connected. LFOs saddle offenders with debt long after they have fulfilled other commitments of the sentence and probation, rising above and beyond the original conviction. Washington State's Legislature recently

prohibited imposing fines on those who can't pay and stopped the State's practice of accruing interest on non-restitution fines.<sup>28</sup> We anticipate these policy changes could disrupt the homelessness-incarceration nexus. Future research should investigate the effects of LFO policy reform on duration of homelessness, especially in relation to other predictors, such as age, gender, race and education.

## Acknowledgments

Thanks to Scott Morrow, Trey Nuzum, and everyone at SHARE/WHEEL and Nickelsville. CSDE Computing and the UW tech fee granted access to statistical software. Alexis Harris Ph.D. and Tarra Simmons contributed legal expertise. Jessica Bielenberg conducted pilot research on a separate question and lent her mentorship and guidance.

Danielle Minji Jung offered research support. Rebecca Gorrie, Carissa Liau, and Jessica Lo volunteered help with data collection. Vicky Lawson's Honors students Karina Paup Byrnes, Paul Curry, Christine Lew, Bryce Martz, Argerly Stapakis, Chloe Thompson, and Jeremy Voss helped with data collection. The residents of Tent City 3 helped to pilot the survey. We thank all of our participants for sharing their stories.

## Financial support

This work was supported by the Northwest Center for Public Health Practice at the University of Washington School of Public Health.

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